

WDFW COASTAL ROCKFISH SURVEYS

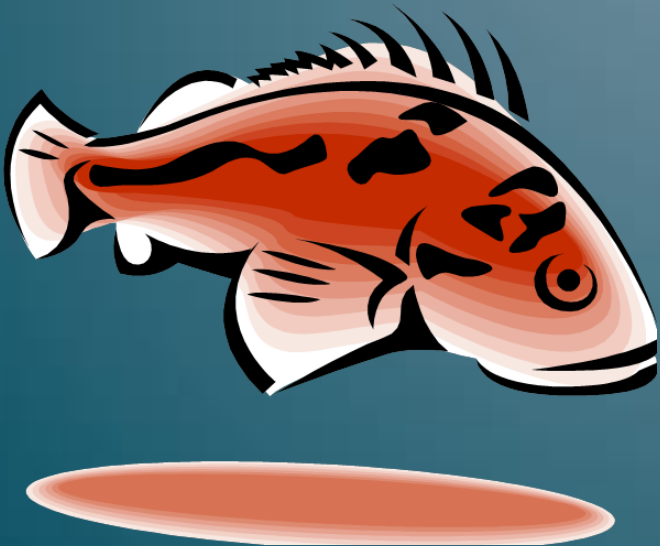
*Brad Speidel
Heather Reed*



INTRODUCTION

Fishery independent rockfish surveys

- *Nearshore – Black rockfish and other species inside territorial waters*
- *Offshore – Yelloweye rockfish and other rockfish in untrawlable habitat*



“To preserve, protect and perpetuate fish, wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities.”

PROJECT BACKGROUND NEARSHORE

1981 - 1984

Collect Life History Information - External Tags

1985

Mixing Rates Pilot Study - External Tags

1986 - 1994

Entire Range, Tag Recovery Program, Abundance - External Tags

1998 - 2013

Central Coast, Tag Recovery Program, Abundance - Internal Tags

- *Black Rockfish*
- Collaborative Effort – WDFW, UW, WSCBA, Fishermen



PROJECT BACKGROUND OFFSHORE

- IPHC – Station 1082
- TRSS - yelloweye
- Cooperative data collection
- Untrawlable habitat



SURVEY METHODS

Recreational vs Commercial



NEARSHORE HOOK AND LINE

RECREATIONAL GEARS

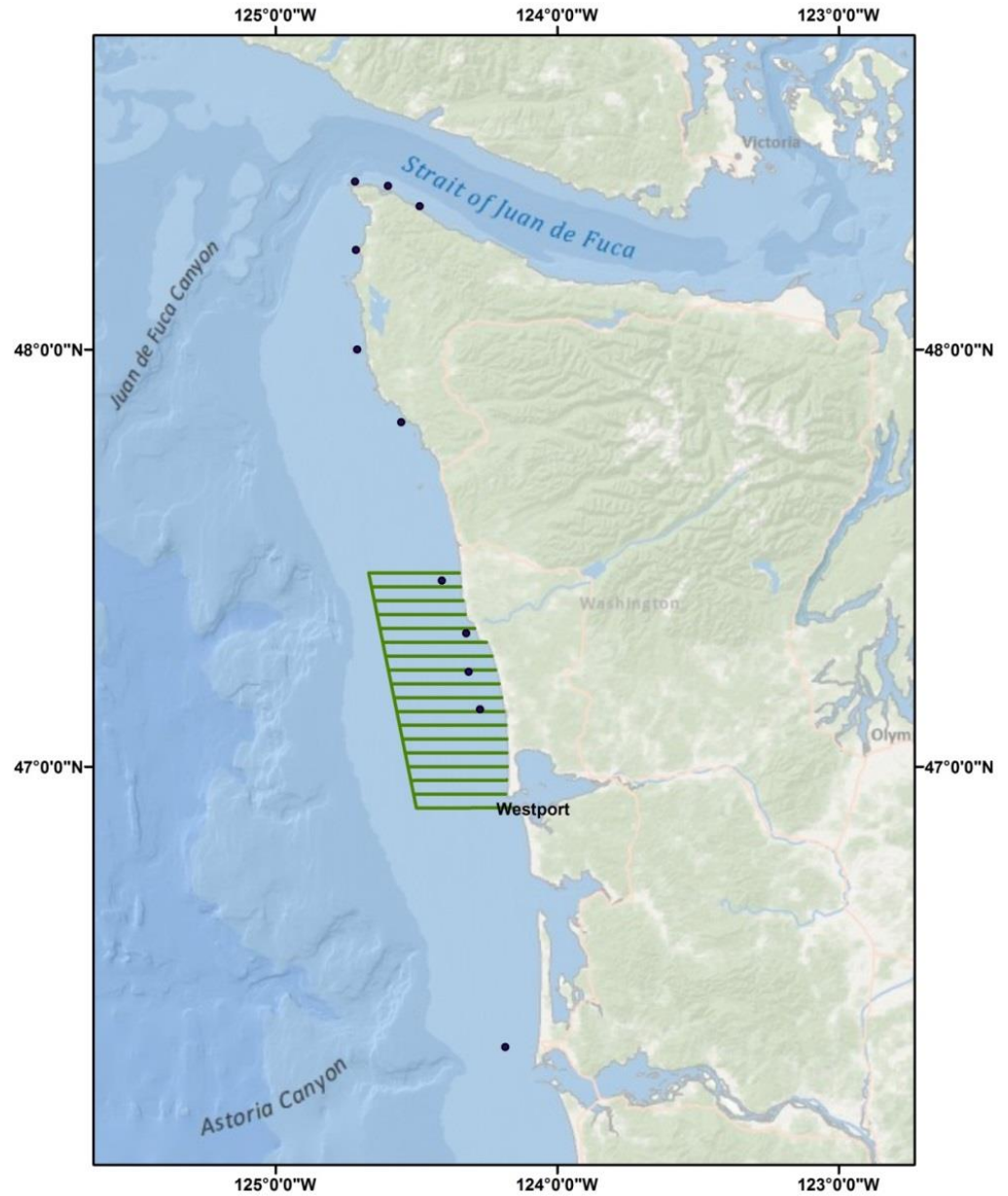


- *Rod and reel – sport fishing lures*
- *Chartered day trips*
- *Volunteer anglers*
- *Spring and sometimes fall timing – fishery, weather*
- *Area/time*
- *Data Collection: CPUE, location, biological information, tagging information, habitat*
- *Tagging component – recover independently and from fishery*



LOCATIONS

- Central Coast
- Index Sites



VOLUNTEERS



RockfishTagging@dfw.wa.gov

FUTURE AND CHALLENGES



- *Broaden species focus*
- *CPUE index*
- *Habitat evaluation – representative sample*
- *Experiment with gears*

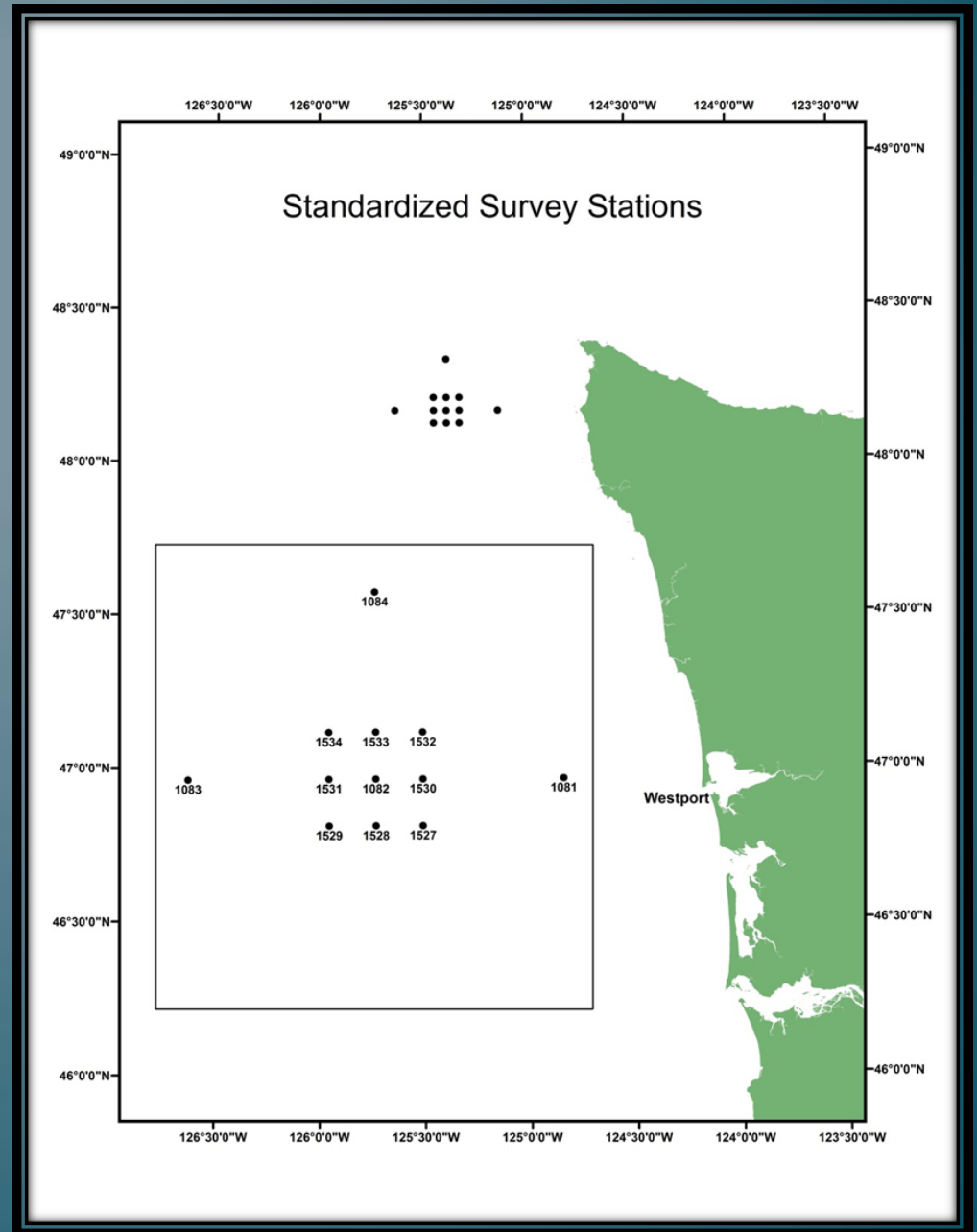
OFFSHORE HOOK AND LINE

COMMERCIAL GEARS

- Fixed longline gear – IPHC standard
- Multi-day trips
- Twice annually
- Survey Grid – THSS, TRSS
- Data Collection: CPUE, species composition, biological information from rockfish and other catch
- Tagging component – yelloweye



LOCATIONS

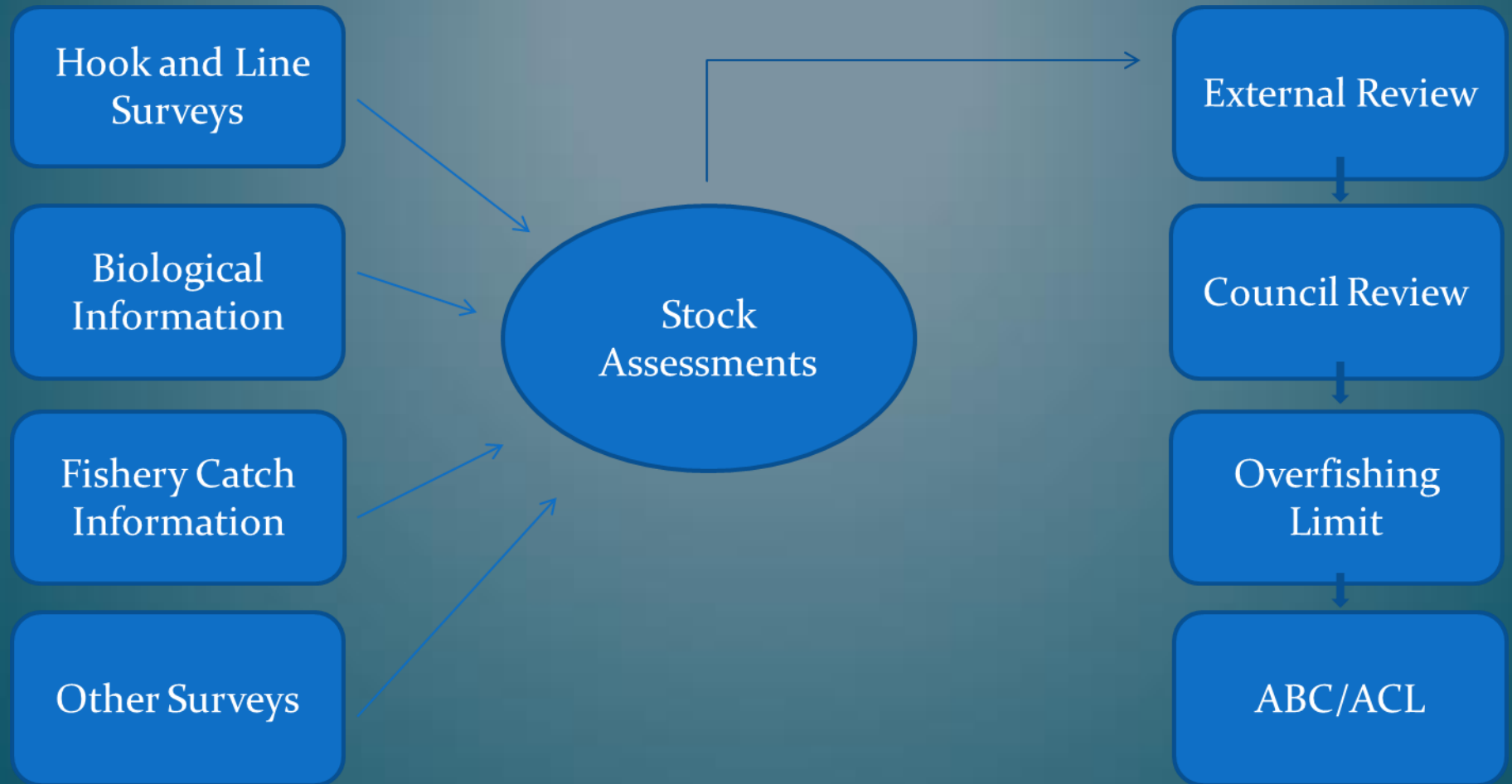


FUTURE AND CHALLENGES



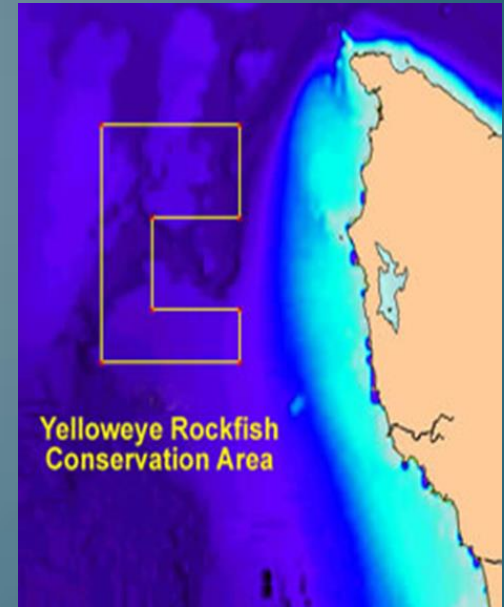
- *CPUE index*
- *Refine stations*
- *Refine gear*
- *Habitat information*

STOCK ASSESSMENTS



MANAGEMENT MEASURES

- *Commercial*
 - *Closed areas (RCAs)*
 - *Closed commercial fishing inside 3-miles (1995/1999)*
 - *No bottomfish trawl north of Cape Alava (2008)*
 - *Non-trawl RCA closed from shore to 100 fm north of WA-OR border*
- *Recreational*
 - *Non retention*
 - *Depth restrictions*
 - *Closed areas (RCAs)*

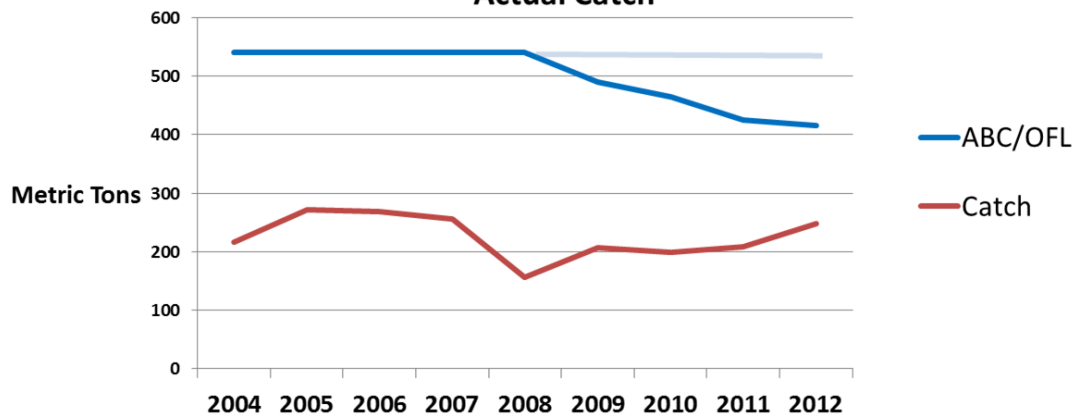


FISHERY MANAGEMENT - RESULTS

WA Recreational Yelloweye Catch



Acceptable Biological Catch versus Actual Catch



ADDITIONAL INFORMATION

- *Recreational logbooks*
 - *Designed to get more specific spatial data on nearshore rockfish*
 - *Pilot project beginning this year*
 - *Will provide data to inform rockfish survey*



EDUCATION AND OUTREACH



EDUCATION AND OUTREACH – FISH ID



SPECIES IDENTIFICATION CARD

Anglers are encouraged to use this card to identify rockfish and other co-occurring species often confused with rockfish. Space is provided to keep a daily tally of fish released. It is hoped this information is useful to anglers during WDFW dockside interviews. These forms *do not* need to be returned to WDFW. For more information go to our website at: <http://wdfw.wa.gov>

RETENTION OF ROCKFISH PROHIBITED IN CATCH RECORD AREAS 6-13. (See regulations for spearfishing).

Yelloweye Rockfish

RETENTION PROHIBITED



Adult

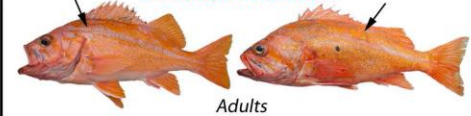
Juvenile

Bright yellow eye and raspy ridges above eye. Fins usually have black edges. Juveniles have 1 or 2 white stripes along side of body.

Number of fish released:

Canary Rockfish

RETENTION PROHIBITED

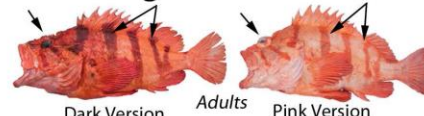


Adults

Typically three stripes across side of head and gill plate. Body orange mottled with gray.

Number of fish released:

Tiger Rockfish



Dark Version

Adults

Pink Version

5 or 6 vertical bars on body. Strong ridges between eyes.

Number of fish released:

Vermilion Rockfish



Adults

Body reddish and mottled with gray. Rough scales on upper jaw.

Number of fish released:

Black Rockfish



Large mouth. Body mottled with gray, white belly. Anal fin rounded or slanted anteriorly.

Number of fish released:

Blue Rockfish



Small mouth. Vague dark bars across forehead. Anal fin vertical or slanted posteriorly.

Number of fish released:

Widow Rockfish



Small mouth, anal fin slanted posteriorly.

Number of fish released:

Bocaccio Rockfish



Body orange, olive or brown. Large mouth extending upwards. Slightly concave between mouth and dorsal fin.

Number of fish released: